JPRS-WST-87-001

25 MARCH 1987

West Europe Report

SCIENCE AND TECHNOLOGY

TABLES OF CONTENTS

JPRS-WST-86-001, 14 JANUARY 1986-

JPRS-WST-86-018, 28 APRIL 1986

FBIS FOREIGN BROADCAST INFORMATION SERVICE

NOTE: This is the last book of tables of contents to be published in the series WEST EUROPE REPORT: SCIENCE AND TECHNOLOGY. Material formerly found in this series is now published in the EUROPE/LATIN AMERICA REPORT: SCIENCE AND TECHNOLOGY.

NOTE

JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

PROCUREMENT OF PUBLICATIONS

JPRS publications may be ordered from the National Technical Information Service, Springfield, Virginia 22161. In ordering, it is recommended that the JPRS number, title, date and author, if applicable, of publication be cited.

Current JPRS publications are announced in Government Reports Announcements issued semi-monthly by the National Technical Information Service, and are listed in the Monthly Catalog of U.S. Government Publications issued by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Correspondence pertaining to matters other than procurement may be addressed to Joint Publications Research Service, 1000 North Glebe Road, Arlington, Virginia 22201.

JPRS-WST-86-001

14 January 1986

WEST EUROPE REPORT

SCIENCE AND TECHNOLOGY

CONTENTS

ADVANCED MATERIALS

First Carbon Fiber Factory in France Opens
(AFP SCIENCES, 17 Oct 85)..... 1

BIOTECHNOLOGY

Overview of Start-up Biotech Firms in FRG
(Wolfgang Gehrmann; DIE ZEIT, 27 Sep 85)..... 3

Briefs
ERRATUM: DM 6 Million for Berlin Membrane Research 8
New President for Transgene 9

COMPUTERS

Scientists, Sites in Netherlands Artificial Intelligence Work
(Bas den Hond; NRC HANDELSBLAD, 31 Oct 85)..... 10

FACTORY AUTOMATION

Development, Use of Asea's Swinging Arm Robot in Sweden
(ASEA TIDNING, No 3-4, 1985)..... 15

European Cooperation Sought in Machine Tool Industry
(Piet Salens; INDUSTRIE, Sep 85)..... 23

MICROELECTRONICS

Siemens' 'Megabit' Subsidies in Danger Due to Toshiba Deal
(DER SPIEGEL, NRC HANDELSBLAD, 29, 31 Oct 85)..... 27

Riesenhuber Angered 27
Netherlands' View 28

SCIENTIFIC AND INDUSTRIAL POLICY

Belgians Examine Goals of Eureka, Esprit, Brite
(Franco Menozzi; INDUSTRIE MAGAZINE, Oct 85)..... 30

French Research, Technology Minister Curien on Eureka
(Wubbo Tempel; NRC HANDELSBLAD, 23 Oct 85)..... 34

Norway Suggests Projects for, Comments on Eureka
(Gunnar Selgard; AFTENPOSTEN, 6, 7 Nov 85)..... 36

Ten Proposals Made 38
Commentary on Cooperation 39

FRG Venture Capital Firms Flourish, but Lack Customers
(INDUSTRIEMAGAZIN, 15 Oct 85)..... 41

New Conditions for FRG R&D Personnel Subsidies in 1985
(HANDELSBLATT, 12 Aug 85)..... 52

'Flood' of Applicants for FRG Aid Program for Start-Ups
(HANDELSBLATT, 12 Aug 85)..... 55

EC Venture Capital To Promote Advanced Manufacturing Processes
(HANDELSBLATT, 20 Aug 85)..... 57

JPRS-WST-86-002

15 JANUARY 1986

West Europe Report

SCIENCE AND TECHNOLOGY

TABLES OF CONTENTS

JPRS-WST-85-001, 2 JANUARY 1985-

JPRS-WST-85-034, 30 DECEMBER 1985

FBIS FOREIGN BROADCAST INFORMATION SERVICE

JPRS-WST-86-003

16 January 1986

WEST EUROPE REPORT

SCIENCE AND TECHNOLOGY

CONTENTS

AEROSPACE

SEP Exceeds Expected 1985 Results, Prepares Eureka Plan
(ELECTRONIQUE ACTUALITES, 25 Oct 85)..... 1

Second Ariane Launching Facility Completed
(C. Dana; ESA BULLETIN, No 42, 1985)..... 4

Hydrogen Injection Valves Blamed for Ariane Failure
(AFP SCIENCES, 17 Oct 85)..... 10

FRG Excludes Participation in Hermes Before Year 2000
(AFP SCIENCES, 17 Oct 85)..... 12

SEP To Make Ceramic/Ceramic Composite Parts for Hermes
(AFP SCIENCES, 17 Oct 85)..... 14

Dassault, Aerospatiale of France To Split Hermes Work
(AFP SCIENCES, 24 Oct 85; ELECTRONIQUE ACTUALITES,
25 Oct 85)..... 17

Financing Still Undecided 17
Subsystems Being Studied, by H. Pradenc 20

BIOTECHNOLOGY

Briefs
Italian Biotechnology Committee 22
French-Japanese Biotech Lab 22
Canadian Biotics Lab 22

COMPUTERS

Details on 'Marie,' Part of France's 'Marisis' Supercomputer
(Ph. Marel; ELECTRONIQUE ACTUALITES, 25 Oct 85)..... 23

DEFENSE INDUSTRIES

French Very High Speed IC Program for Military Applications
(ELECTRONIQUE, Sep 85)..... 25

Briefs
Military Electronics at CIMSA-SINTRA 27

FACTORY AUTOMATION

Briefs
Eureka Robotics Project 28

MICROELECTRONICS

Bull of France Sets Sales, Computer Strategy
(ELECTRONIQUE ACTUALITES, 18 Oct 85; AFP SCIENCES,
17 Oct 85)..... 29

More Business Abroad, by Ph. Marel 29
Computers Compatible With IBM 30

Siemens Produces First LED To Emit in Blue
(Philippe Le Coeur; INDUSTRIES ET TECHNIQUES, 20 Oct 85).. 31

Briefs
SGS Singapore Semiconductor Factory 32

SCIENTIFIC AND INDUSTRIAL POLICY

French Senate Report: Electronics Nationalizations Are 'Error'
(ELECTRONIQUE ACTUALITES, 18 Oct 85)..... 33

Overview of Projected French Participation in Eureka
(EUREKA: LA RENAISSANCE TECHNOLOGIQUE DE L'EUROPE,
Jun 85)..... 37

Various European Agencies, Firms Announce Eureka Proposals
(ELECTRONIQUE ACTUALITES, 17 Oct 85; AFP SCIENCES,
17 Oct 85)..... 90

France's CEA To Participate 90
CERN Offers Superconductivity, Cryogenics 91
Aeronautics, Aerospace Firms Link Up 91

September ESPRIT Meeting Highlights 7 Promising Projects (Nicolas Rousseaux; ZERO UN INFORMATIQUE HEBDO, 30 Sep 85)..... 93

TECHNOLOGY TRANSFER

Briefs

Renault Equipment to USSR 96

JPRS-WST-86-004

23 January 1986

WEST EUROPE REPORT

SCIENCE AND TECHNOLOGY

CONTENTS

AEROSPACE

ESA's 20-Year Exploration Program
(Govert Schilling; ZENIT, Jul-Aug 85) 1

BIOTECHNOLOGY

Research at Main FRG Biotechnology Center in Braunschweig
(B. Junghanss; VDI NACHRICHTEN, 6 Sep 85) 7

Briefs
Braunschweig Achievements in 1984 11

COMPUTERS

ECRC Presents Artificial Intelligence Prototypes
(COMPUTERWOCHE, 11 Oct 85) 12

Briefs
Cray 1S 2000 for Switzerland 14
Status of FRG Supercomputer 14

DEFENSE INDUSTRIES

DFVLR of FRG Takes Over 'Attas' Research Aircraft Project
(A. Johansen; FRANKFURTER ALLGEMEINE ZEITUNG, 30 Oct 85). 15

FACTORY AUTOMATION

Italian 'Modiac' System for Controlling Industrial Robots
(Giorgio Bruno, et al.; NOTIZIARIO TECNICO AMMA, Mar 85). 17

Alfa Romeo R&D Program Leads to New 'Flexible Laser' System
(FRANKFURTER ÆITUNG/BLICK DURCH DIE WIRTSCHAFT, 13 Nov 85) 29

MICROELECTRONICS

Subsidies, Research at Netherlands' Microelectronics Centers
(Richard Hovers; PT AKTUEEL, 25 Sep 85) 31

Analysis of French Semiconductor Industry
(Gilbert Pointout; L'EXPANSION, 24 May-6 Jun 85) 33

Bosch of FRG Finds New Way To Design Chips Quickly
(FRANKFURTER ZEITUNG/BLICK DURCH DIE WIRTSCHAFT,
13 Nov 85) 37

Philips Develops New Kind of Semiconductor Sensor
(VDI NACHRICHTEN, 5 Jul 85) 40

Briefs
Regensburg Chip Factory Opens 41

SCIENTIFIC AND INDUSTRIAL POLICY

Interview With Official Working on FRG Eureka Policy
(G. H. Altenmueller, W. Mock; VDI NACHRICHTEN, 27 Sep 85) 42

Max Planck Institute Against Participating in SDI, for Eureka
(FRANKFURTER ALLGEMEINE ZEITUNG, 4 Dec 85) 45

Briefs
Esprit Accepts CNET Projects 46
Eureka Open to Non-Europeans 46
Philips Participation in Esprit 47
FRG Advanced Research Funding 47

JPRS-WST-86-005

31 January 1986

WEST EUROPE REPORT

SCIENCE AND TECHNOLOGY

CONTENTS

AEROSPACE

France Chooses Corps of 7 Astronauts
(SCIENCES & AVENIR, Oct 85)..... 1

Briefs
FRG, Italy Aerospace Firm 2

BIOTECHNOLOGY

Sweden Promotes Biotech Research at New Institute
(Guno Haska; BIOTEKNIK & BIOKEMI, Nov 85)..... 3

Official at Denmark's Nordisk Gentofte on Research Plans
(Staffan Dahllof; BIOTEKNIK & BIOKEMI, Nov 85)..... 6

Danish Biotech Laws Suggested
(Staffan Dahllof; BIOTEKNIK & BIOKEMI, Nov 85)..... 10

COMPUTERS

'Suprenum' Firm Founded To Produce First FRG 'Supercomputer'
(DIE COMPUTER ZEITUNG, 18 Sep 85)..... 12

ECRC Research Focuses on Artificial Intelligence
(ZERO UN INFORMATIQUE HEBDO, 14 Oct 85)..... 13

European Sites, Scientists for Optical Computer Research
(Arno Noeldechen; TECHNISCHE RUNDSCHAU, 15 Oct 85)..... 16

Computers With 1 Billion Operations/Second at Siemens
(DIE COMPUTER ZEITUNG, 9 Oct 85)..... 19

DEFENSE INDUSTRIES

France Outlines Views on Military Use of Space at WEU Meeting
(ELECTRONIQUE ACTUALITES, 22 Nov 85)..... 21

Military Data Processing at Thomson of France
(ZERO UN INFORMATIQUE HEBDO, 14 Oct 85)..... 24

FACTORY AUTOMATION

French CIM Firm Founds Two Subsidiaries
(Antoine Schoen; L'USINE NOUVELLE, 19 Sep 85)..... 25

Peugeot Plant in Poissy, France, Automates, Installs Robots
(Michel Defaux; L'USINE NOUVELLE, 19 Sep 85)..... 27

Production Equipment for Fiat's 'Fire' Engine in Termoli
(Alain Perez; INDUSTRIES & TECHNIQUES, 10 Oct 85)..... 29

Briefs
Esprit Seeing-Robot Project 32
ASEA Industrial Robot Branch 32

MICROELECTRONICS

Layout, Equipment at Siemens Chip Plant Being Built Near Munich
(PRODUKTION, 26 Sep 85)..... 33

Swiss University Installs Cray 1S2000 Supercomputer
(ELECTRONIQUE, Oct 85)..... 37

Siemens, Fraunhofer Automate Masking for X-ray Lithography
(DIE COMPUTER ZEITUNG, 16 Oct 85)..... 39

Briefs
FRG Liquid Crystal Displays 41

SCIENTIFIC AND INDUSTRIAL POLICY

Analysis of France's Role in European High Tech Projects
(Wubbo Tempel; NRC HANDELSBLAD, 23 Oct 85)..... 42

Details on FRG Subsidies to Small Firms Hiring R&D Personnel
(COMPUTERWOCHE, 20 Sep 85)..... 48

Interview With Official Working on FRG Eureka Policy
(G.H. Altenmueller, W. Mock; VDI NACHRICHTEN, 27 Sep 85).. 50

Belgian Industry Courting Race, Brite, Eureka
(INDUSTRIE MAGAZINE, Oct 85)..... 53

Netherlands Fears France-FRG Axis in Eureka
(ANP NEWS BULLETIN, 14 Dec 85)..... 55

Netherlands Fund 'Instir' Subsidizes R&D Firms, Personnel
(J.A. van Voorhout; PT AKTUEEL, 2 Oct 85)..... 57

Study Shows Esprit Needs More Money, Urges Building Prototypes
(NRC HANDELSBLAD, 19 Oct 85)..... 61

Esprit Improves Scientific, Business Cooperation, Says Expert
(Dick Wittenberg; NRC HANDELSBLAD, 19 Oct 85)..... 62

Briefs
Siemens Builds Berlin Factories 64
Philips Joins Race Program 64

TECHNOLOGY TRANSFER

Briefs
'Katalavox' Shown in USSR 65

JPRS-WST-86-006

12 February 1986

WEST EUROPE REPORT

SCIENCE AND TECHNOLOGY

CONTENTS

AEROSPACE

SPD of FRG Urges Hermes Participation
(FRANKFURTER ALLGEMEINE ZEITUNG, 18 Jan 86) 1

Briefs
Fokker 50 Flight Tested 2

BIOTECHNOLOGY

Belgium's IRE-MEDGENIX Developing New Products
(C. Calinesco; INDUSTRIE MAGAZINE, Jul-Aug 85) 3

French-Japanese Biotech Cooperation Project Proposed
(BIOFUTUR, Oct 85) 7

Chief of Sweden's Fermenta on Company Strategy
(Lars Lundgren; BIOTEKNIK & BIOKEMI, Nov 85) 8

Briefs
FRG Plant Genetic Engineering 13

FACTORY AUTOMATION

Firms, Funds Up to Fall 1985 in FRG Process Technology
(PRODUKTION, 24 Oct 85) 14

MICROELECTRONICS

France's Thomson, Matra-Harris Expanding Investment
(Claude Amalric; L'USINE NOUVELLE, 31 Oct 85) 18

Thomson Outlines Strategy After Mostek Acquisition
(J.-P. Della Mussia; ELECTRONIQUE ACTUALITES, 22 Nov 85) . 21

Stocks, Help From State Bring France's Bull Into Black
(Olivier Picon; ELECTRONIQUE ACTUALITES, 22 Nov 85) 24

Siemens Steps Up Effort To Produce 1-Megabit Chip by 1986
(Wim Amerongen; PT AKTUEEL, 9 Oct 85) 28

Philips of Netherlands Wants To 'Spread Activities' More
(NRC HANDELSBLAD, 22 Nov 85) 30

Philips Executive Says Higher Profit Needed To Finance R&D
(Dick Wittenberg; NRC HANDELSBLAD, 27 Nov 85) 32

SCIENTIFIC AND INDUSTRIAL POLICY

New Robotics Projects Proposed for Eureka
(LES ECHOS, 18 Oct 85) 36

France's Curien on Implementation of Eureka
(BIOFUTUR, Oct 85) 37

CIT ALCATEL Plans To Float Shares for Capital Increase
(LE MONDE, 21 Oct 85) 41

Funding for Applied Research Up at FRG's Fraunhofer Institute
(VDI NACHRICHTEN, 25 Oct 85) 43

FRG Program To Promote Exchange Between Science, Industry
(CHEMISCHE RUNDSCHAU, 1 Nov 85) 46

TECHNOLOGY TRANSFER

Sweden Wrestles With Ways To Stop Being Tech Transfer Point
(Lars Christiansson; SVENSKA DAGBLADET, various dates) .. 48

U.S., Ericsson Officials Meet 48
Government Considers Laws 51

JPRS-WST-86-007

20 February 1986

WEST EUROPE REPORT

SCIENCE AND TECHNOLOGY

CONTENTS

ADVANCED MATERIALS

FRG Launches 'Materials Research' Program Funded to 1994
(FRANKFURTER ALLGEMEINE ZEITUNG, 11 Dec 85)..... 1

Preliminary Experiments With PEEK in Netherlands
(PT AKTUEEL, 23 Oct 85)..... 3

AEROSPACE

Imminent NASA Contracts Push FRG Ahead on Columbus
(Goetz Wange; FLUG REVUE, Nov 85)..... 4

Austrian Firms, Funds Involved in Its ESA Membership
(Hedi Cech; DIE PRESSE, 6 Dec 85)..... 7

FRG's Riesenhuber Advises Against Hermes Participation
(SUEDDEUTSCHE ZEITUNG, 23 Dec 85)..... 10

BIOTECHNOLOGY

Kabi-Vitrum, Sanofi Developing Growth Hormone
(Herve Plagnol; L'USINE NOUVELLE, 31 Oct 85)..... 13

New Swedish Genetic Engineering Center
(BIOTEKNIK & BIOKEMI, Nov 85)..... 15

Norway Funds Biotech Research for Agricultural Application
(Einar Kr. Holtet; AFTENPOSTEN, 13 Dec 85)..... 17

Research Costs for Bayer of FRG in 1984
(CHEMISCHE RUNDSCHAU, 18 Oct 85)..... 19

Briefs
Belgian Flanders Adds Innogenetics 22
Biotech Research in Finland 22

COMPUTERS

Thomson Computers for France's 'Data Processing for All' Plan
(DIE COMPUTER ZEITUNG, 2 Oct 85)..... 23

Briefs
Finnish, Swedish Computer Tie 25
French Software Engineering in ESPRIT 25

MICROELECTRONICS

Siemens Builds New Center at Munich-Neuperlach
(ELEKTRONIKER, Nov 85)..... 26

Siemens Invests To Expand Austrian Chip Plants
(Josef Urschitz; DIE PRESSE, 28 Nov 85)..... 28

France's Matra Reports 1985 Losses, 1986 Plans
(Philippe Moins; ZERO UN INFORMATIQUE HEBDO, 4 Nov 85)..... 30

Briefs
Saab-Scania Joints ES2 33

SCIENTIFIC AND INDUSTRIAL POLICY

Eureka's 24 Initial Projects Surveyed
(Marc Chabreuil; L'USINE NOUVELLE, 14 Nov 85)..... 34

European Strategies for Factory Automation Compared
(Antoine Schoen; L'USINE NOUVELLE, 26 Sep 85)..... 40

Industrial Standards From ESPRIT Program
(NRC HANDELSBLAD, 27 Aug 85)..... 46

Task Force Heading ESPRIT, RACE Described
(Philippe Lemaitre; LE MONDE, 13 Sep 85)..... 47

TECHNOLOGY TRANSFER

Sweden's Research City Ideon Takes Shape
(Osmo Vatanen; DAGENS NYHETER, 27 Dec 85)..... 50

Research-to-Applications Tech Transfer in FRG Detailed
(ONLINE, Oct 85)..... 53

JPRS-WST-86-008

6 March 1986

WEST EUROPE REPORT

SCIENCE AND TECHNOLOGY

CONTENTS

ADVANCED MATERIALS

French Ceramics Designed for Hermes
(Pierre Laperrousaz; L'USINE NOUVELLE, 14 Nov 85) 1

AEROSPACE

France Awaits FRG Decision on Hermes: CNES Lets Contracts
(LES ECHOS, 9 Jan 86) 3

Bonn Delays, by Didier Pavy 3
French Companies Vie for Contracts, by Honore Berard 6

Briefs
Volvo Space Launcher Project 8
New Engines for Ariane 4 8
Austria, Norway in ESA 9

AUTOMOBILE INDUSTRY

Daimler-Benz Has Diversification Strategy for Future
(THE ECONOMIST, 25 Jan 86) 10

BIOTECHNOLOGY

Major Areas for Eureka Research Proposed
(BIOFUTUR, Oct 85) 14

Netherlands Promotes Biotech Research
(AFP SCIENCES, 31 Oct 85) 20

French Fund for Biotech Uses in Food Production
(AFP SCIENCES, 31 Oct 85) 22

CIVIL AVIATION

FRG's 'Attas' Called Most Modern In-Flight Simulator Aircraft
(VDI NACHRICHTEN, 25 Oct 85) 24

Australia Orders Airbus Without SNECMA-GE Engines
(LA TRIBUNE DE L'ECONOMIE, 21 Dec 85) 26

Briefs
A-320's for Lufthansa 28

COMPUTERS

Bull of France Expands Line of Scientific Computers
(Guy Hervier; ZERO UN INFORMATIQUE HEBDO, 12 Nov 85) 29

Briefs
French-British Supercomputer 33
French Computers to Soviets 33

FACTORY AUTOMATION

French, German Initiatives in Mobile Robots
(Michel Defaux; L'USINE NOUVELLE, 24 Oct 85) 34

Briefs
New Asea Robotics Factory 38

METALLURGICAL INDUSTRIES

France's Usinor Makes Competitive Gains
(Jean Roume; L'USINE NOUVELLE, 24 Oct 85) 39

MICROELECTRONICS

France's Solems Adds Amorphous Silicon Technology
(Alain Dieul; L'USINE NOUVELLE, 7 Nov 85) 42

France's Bull Adjusts Market Strategy
(Jean-Pierre Jolivet; L'USINE NOUVELLE, 14 Nov 85) 45

SCIENTIFIC AND INDUSTRIAL POLICY

Meeting Reveals Some Support for Eureka Link to Military
(H. Frey; VDI NACHRICHTEN, 18 Oct 85) 47

Norway's Project Coordinator for Eureka Interviewed
(Georg Parmann; AFTENPOSTEN, 28 Dec 85) 50

FRG Group Sees 'Limited' Spin-offs From SDI to Civil Sector
(HANDELSBLATT, 3 Sep 85) 54

French Civil R&D Budget for 1986 Up 8.2 Percent
(INDUSTRIES & TECHNIQUES, 1 Nov 85) 56

Tax Credits, Research Positions in French 1986 R&D Budget
(AFP SCIENCES, 31 Oct 85) 59

French University Research Budget Increased for 1986
(LA TRIBUNE DE L'ECONOMIE, 10 Dec 85) 62

New French Venture Capital Firms Established
(Michel Cahier; LA TRIBUNE DE L'ECONOMIE, 14-15 Dec 85) 64

Netherlands 1986-1990 R&D Budget
(AFP SCIENCES, 31 Oct 85) 65

JPRS-WST-86-009

14 March 1986

WEST EUROPE REPORT

SCIENCE AND TECHNOLOGY

CONTENTS

ADVANCED MATERIALS

French Research in Amorphous Silicon, Gallium Arsenide
(MESURES, 4 Nov 85) 1

Briefs
French Carbon Fiber Production 3
Krupp Automated Composites Cutter 3
New Gallium Production Method 3

AUTOMOBILE INDUSTRY

Bosch of FRG Develops Auto Navigation System Using Sensors
(C. Reuber; VDI NACHRICHTEN, 1 Nov 85) 4

BIOTECHNOLOGY

Biogen, Under New Leadership, Outlines Recovery Strategy
(INDUSTRIEMAGAZIN, 15 Nov 85) 7

Briefs
French Artificial Seed Research 13
Transgene Increases Capital 14

CIVIL AVIATION

Components in Airbus A.320 Instrument Panel Described
(Nicolas Rousseaux; ZERO UN INFORMATIQUE HEBDO, 21 Oct 85) 15

COMPUTERS

GMD of FRG Describes AI, Expert System Research
(COMPUTER WOCHE, 1 Nov 85) 19

Europe-Wide Project EJOB Researchers Optical Computer
(VDI NACHRICHTEN, 18 Oct 85) 21

Siemens Revamps Series 7500 Top-of-Line Computers
(ZERO UN INFORMATIQUE HEBDO, 21 Oct 85) 24

Briefs
French Artificial Intelligence Machine 27
Eureka Expert System for Threats 27
France-Singapore Artificial Intelligence 28
Erlangen Develops 'Super Computer' 28

DEFENSE INDUSTRIES

Briefs
UK-FRG Laser Gyroscope 29

FACTORY AUTOMATION

Siemens, Italian Firm To Cooperate in NC Devices
(PRODUKTION, 26 Sep 85) 30

Briefs
Renault Flexible Workshop for SNECMA 31

MICROELECTRONICS

FRG Scientists Analyze Innards of Superconducting Components
(VDI NACHRICHTEN, 1 Nov 85) 32

Microstructure Technology Work at FRG Fraunhofer Institute
(WIRTSCHAFTSWOCHE, 8 Nov 85) 33

Daimler Announces 'Prometheus' Eureka Program
(FRANKFURTER ZEITUNG/BLICK DURCH DIE WIRTSCHAFT, 3 Dec 85). 35

Siemens, Philips Receive Government Funding for Megaproject
(HANDELSBLATT, 9 Dec 85) 36

Philips Announces Profits, Personnel Trends for 1985
(NRC HANDELSBLAD, 10 Jan 86) 38

Philips To Increase Presence in Japan
(Dick Wittenberg; NRC HANDELSBLAD, 14 Jan 86) 40

Japanese To Get Megaproject Research Results Through Philips
(Dick Wittenberg; NRC HANDELSBLAD, 14 Jan 86) 42

SCIENTIFIC AND INDUSTRIAL POLICY

Committee Recommends Esprit Funding Through 1993
(AFP SCIENCES, 28 Nov 85) 44

Money for French Industrial Modernization Fund in 1986
(AFP SCIENCES, 28 Nov 85) 46

CNR, IRI Sign Agreement on S&T Research Cooperation
(Alessandro Ovi; MEDIA DUEMILA, No 11, Dec 85) 48

CNR Develops Program for Joint Technological Cooperation
(Sisto Capri; MEDIA DUEMILA, No 11, Dec 85) 51

JPRS-WST-86-010

17 March 1986

WEST EUROPE REPORT

SCIENCE AND TECHNOLOGY

CONTENTS

ADVANCED MATERIALS

European Production of Reinforced Thermoplastics Growing
(Pierre Laperrousaz; L'USINE NOUVELLE, 12 Dec 85) 1

France's Lafarge Reorganizes Ceramics Research
(Helene Constanty; L'USINE NOUVELLE, 2 Jan 86) 4

France's Rhone-Poulenc Reorganizes Plastics Research
(Pierre Laperrousaz; L'USINE NOUVELLE, 2 Jan 86) 6

AEROSPACE

Norway Plans Aerospace Budget in View of Entering ESA
(Ulf Peter Hellstrom; AFTENPOSTEN, 14 Jan 86) 8

BIOTECHNOLOGY

Belgian Eco-Bio Developing Market Strategy
(Guido Swillen; TECHNIVISIE, 18 Sep 85) 10

Briefs
Industrial Enzyme Production 14

CIVIL AVIATION

Aerospatiale of France Announces Research on 'Super-Concorde'
(Jean-Francois Jacquier; LE NOUVEL ECONOMISTE, 17 Jan 86) 15

Briefs
Airbus Subcontract to Spain 18

COMPUTERS

Details on FRG 'Starlet,' European Optical Computer Work
(Michael Wett; FRANKFURTER ZEITUNG/BLICK DURCH DIE
WIRTSCHAFT, 8 Nov 85) 19

GMD Expert System Research Group Seeks To Apply Results
(COMPUTERWOCHE, 8 Nov 85) 21

Briefs
Norway Gets Supercomputer 23

FACTORY AUTOMATION

Italian Market for CAD/CAM Systems Expanding
(INFORMATICA 70, Oct 85) 24

UK Firm To Integrate MAP Into Factory Automation Concept
(FRANKFURTER ZEITUNG/BLICK DURCH DIE WIRTSCHAFT, 13 Jan 86) 27

MICROELECTRONICS

LEP of France Presents Work in Gallium Arsenide
(ELECTRONIQUE ACTUALITES, 29 Nov 85) 28

Siemens Official Responds to 'Megaproject' Criticism
(Josef Hess; HANDELSBLATT, 17 Dec 85) 30

Briefs
European Laboratory Success 33
France-UK Joint IC Program 33
Siemens Invests in Spain 34

SCIENTIFIC AND INDUSTRIAL POLICY

Switzerland Considers Eureka Projects
(ZERO UN INFORMATIQUE HEBDO, 18 Nov 85) 35

UK, FRG Announce Eureka Projects in Computers, Lasers
(FRANKFURTER ZEITUNG/BLICK DURCH DIE WIRTSCHAFT, 23 Dec 85;
FRANKFURTER ALLGEMEINE ZEITUNG, 15 Jan 86) 37

UK Projects 37
Pan-European Laser Project 38

Spain to Participate in Eureka, ESA
DIARIO 16, 28 Jan 86; EL PAIS, 7 Feb 86) 39

Eureka Project, by Tania Juanes 39
European Space Agency 40

Strategy, Focuses of FRG Research Policy Discussed
(INDUSTRIEMAGAZIN, Aug 85) 42

Report Outlines French Optics Program
(Alain Dieul; L'USINE NOUVELLE, 2 Jan 86) 48

Role of France's Research Ministry, S&T Policy Questioned
(Robert Clarke; L'USINE NOUVELLE, 2 Jan 86) 49

Fiat Gains Control of Snia BPD's R&D Effort
(Eugenio Occorso; IL TEMPO, 30 Nov 85) 51

High Tech Parks To Be Built Near Madrid, Barcelona
TIEMPO, 27 Jan 86; LA VANGUARDIA, 23 Jan 86) 54

Fast-Growing Center, by Manuel Hermogenes 54
Barcelona Park 57

TECHNOLOGY TRANSFER

Briefs
Chinese Seeking Eureka Role 58

JPRS-WST-86-011

26 March 1986

WEST EUROPE REPORT

SCIENCE AND TECHNOLOGY

CONTENTS

AEROSPACE

Effects of U.S. Shuttle Problems on Hermes, Ariane
(YA, CINCO DIAS, 30, 31 Jan 86)..... 1

New Insights To Benefit Hermes 1
Increase in Ariane Orders Expected 2

Fiar's Current Efforts in Avionics Summarized
(Patricio Panafa; DEFENSA, Dec 85)..... 4

Hermes, Shuttle Reflect Different ESA, NASA Strategies
(Lorenzo Pinna; SCIENZA DUEMILA, No 1, Jan 86)..... 9

Hermes Debate Raises Questions About FRG Research Policies
(various sources, various dates)..... 13

FRG Industry Fears Being Left Out 13
Mitterrand Urges Kohl To Decide 16
Genscher's Position 18
FDP Criticizes Riesenhuber's Policies 19

Aeritalia, Italian Space Agency, Aerospace Firms Profiled
(Giovanni Caprara; JP4 AERONAUTICA, No 1, Jan 86)..... 21

BIOTECHNOLOGY

French, European Studies of Microgravity
(M.F. Chevallier; BIOFUTUR, Nov 85)..... 29

COMPUTERS

Esprit, Sigma, Alvey Advanced Software Projects Compared
(Bruno Daniel-Jausine; ZERO UN INFORMATIQUE HEBDO, 9 Dec 85)..... 35

Largest Research Center for Expert Systems in Nordic Area
(Torgny Hinnemo; SVENSKA DAGBLADET, 19 Jan 86)..... 40

Computer Industry Standards Effort in Europe
(J.P. Della Mussia; ELECTRONIQUE ACTUALITES, 31 Jan 86)... 43

Briefs
Saab-Scania Supercomputer 45

MICROELECTRONICS

Italy's SGS Begins Use of Original Fabrication Method
(ELECTRONIQUE ACTUALITES, 31 Jan 86)..... 46

SCIENTIFIC AND INDUSTRIAL POLICY

French-Danish Eureka Project Detailed
(Helene Constanty; L'USINE NOUVELLE, 21 Nov 85)..... 48

Nixdorf VP Klaus Luft on Strategy, Eureka, AI
(Klaus Luft Interview; ZERO UN INFORMATIQUE HEBDO, 9 Dec 85)..... 50

TECHNOLOGY TRANSFER

Swedish Computer Firm Affected by High Tech Embargoes
(Bo G. Andersson; DAGENS NYHETER, 13 Jan 86)..... 58

JPRS-WST-86-012

27 March 1986

WEST EUROPE REPORT

SCIENCE AND TECHNOLOGY

CONTENTS

BIOTECHNOLOGY

French Entrepreneur Launches Bioeurope
(Jean-Bernard Borfiga Interview; BIOFUTUR, Nov 85)..... 1

BMFT of FRG Begins New Biotech Research Grant Program
(CHEMISCHE RUNSCHAU, 10 Jan 86)..... 6

EC Asked To Formulate Uniform Biotech Safety Guidelines
(CHEMISCHE RUNDSCHAU, 24 Jan 86)..... 7

CIVIL AVIATION

Automated Airbus Production Facilities at MBB in FRG
(FRANKFURTER ZEITUNG/BLICK DURCH DIE WIRTSCHAFT,
23 Jan 86)..... 9

MBB Adapts Facilities for Airbus 330, 340 Production
(FRANKFURTER ZEITUNG/BLICK DURCH DIE WIRTSCHAFT,
4 Feb 86)..... 11

COMPUTERS

French Locations, Scientists Doing Software Engineering
(Pierre Lombard; ZERO UN INFORMATIQUE HEBDO, 18 Nov 85)... 12

January 1986 Status French 'Computers for All' Plan
(AFP SCIENCES, 9 Jan 86)..... 16

DEFENSE INDUSTRIES

French EDF Operating Phebus Research Laser
(L'USINE NOUVELLE, 27 Feb 86)..... 17

FACTORY AUTOMATION

Comau Products, Projects Include FMS, CAD/CAM
(MEDIA DUEMILA, No 1, Jan 86)..... 18

France Develops Robots for Public Applications
(Antonella Tarquini; MEDIA DUEMILA, No 11, Dec 85)..... 20

Selenia-Elsag Subsidiary Makes Measurement, Assembly Robots
(MEDIA DUEMILA, No 1, Jan 86)..... 23

MICROELECTRONICS

Firms in FRG, France Cooperate on Optical Data Storage
(CHEMISCHE RUNDSCHAU, 10 Jan 86)..... 25

Telefonica of Spain, Bull of France Join ES2
(ZERO UN INFORMATIQUE, 13 Jan 86)..... 26

Siemens Develops More Powerful Semiconductor Laser Arrays
(FRANKFURTER ZEITUNG/BLICK DURCH DIE WIRTSCHAFT,
27 Jan 86)..... 27

Briefs
SGS, Toshiba Agreement 28

SCIENTIFIC AND INDUSTRIAL POLICY

EC's Policy on 'Race' Detailed
(SISTEMI E AUTOMAZIONE, Oct 85)..... 29

Mainz Nuclear Physics Institute's Microtron Leads Field
(FRANKFURTER ALLGEMEINE, 20 Feb 86)..... 33

French Strategy for Components Market
(ZERO UN INFORMATIQUE HEBDO, 12 Nov 85)..... 35

Project Bids for Esprit Phase 2 To Begin in 1987
(ZERO UN INFORMATIQUE, 13 Jan 86)..... 37

Activities of Venture Captial Firms EVCA, Sofinnova
(LA TRIBUNE DE L'ECONOMIE, ZERO UN INFORMATIQUE,
13, 20 Jan 86)..... 39

Projects, Firms Supported by EVCA 39
Sofinnova Enters Secondary Stock Market 41

Innovations of 1985 Venture Capital Law in France
(Pierre de Pingon; LA TRIBUNE DE L'ECONOMIE, 16 Jan 86)... 44

French Dailies Report 23 Jan 86 High-Level Eureka Meeting
(LE MONDE, LA TRIBUNE DE L'ECONOMIE, 24 Jan 86, 2-3 Feb 86)..... 47

New Projects Presented, by Philippe Lemaitre 47
Role, Structure of Secretariat 49

Belgian, Swiss Minority Roles in Eureka Outlined
(ZERO UN INFORMATIQUE HEBDO, 18 Nov 85)..... 51

Small Countries Disappointed 51
Swiss Participation Assured 52

Turin Roundtable Views Eureka, Esprit Prospect
(MEDIA DUEMILA, No 1, Jan 86)..... 54

Swedish Budget Proposal Shows Decrease in R&D Funds
(Jens Busch; NY TEKNIK, 16 Jan 86)..... 56

TECHNOLOGY TRANSFER

Trade Minister Explains New Export Rules
(Mats Hellstrom; SVENSKA DAGBLADET, 28 Feb 86)..... 58

Press Comments on New Export Regulations
(Editorial; DAGENS NYHETER, SVENSKA DAGBLADET, 28 Feb 86)..... 61

DAGENS NYHETER Editorial 61
SVENSKA DAGBLADET Editorial 62

TECHNOLOGY TRANSFER

Swedish Law To Regulate High-Tech Sales, Transfer
(Tom von Sivers, Mikael Holmstrom; NY TEKNIK, 9 Jan 86)... 64

Finland Plans Largest Computer, Electronics Center at Turku
(UUSI SUOMI, 23 Jan 86)..... 68

JPRS-WST-86-013

28 March 1986

WEST EUROPE REPORT

SCIENCE AND TECHNOLOGY

FRG INFORMATION TECHNOLOGY: PERSPECTIVES, GOALS, FUNDED PROGRAMS

Bonn INFORMATIONSTECHNIK [INFORMATION TECHNOLOGY] in German, 1984 pp 1-80

CONTENTS

Preface..... 1

Summary..... 2

The Significance of Information Technology for the Economic and Social Development of the Federal Republic..... 4

- The Central Role of Information Technology..... 4
- The Information Industry as a Growth Industry..... 6
- Influence of Information Technology on the Economy..... 6
- Influence of Information Technology on Public Services..... 8
- Influence of Information Technology on the Media..... 9
- Transformational Processes in Information Technology..... 9

An International Comparison of the Situation in Information Technology. 11

- Electronic Components 13
- Technological Communications 18
- Entertainment Electronics..... 20
- Data Processing and Office Technology 21
- Industrial Automation..... 24

Objectives of the Federal Government..... 28

Sponsorship Measures for Microelectronics and Information and Communication Technologies..... 31

Conditional Framework 31
Education and Information..... 35
Technological Communications..... 40
Individual Communications..... 41
Electronic Mass Media..... 43
Monopoly and Competition in Telecommunications..... 44
Defense Technology and Maintaining Peace..... 45
Research and Technology..... 46
Research..... 47
Technology..... 50
Electronic Components..... 51
Electronic Data Processing..... 53
Industrial Automation..... 55

Further Developments..... 56

JPRS-WST-86-014

28 March 1986

WEST EUROPE REPORT

SCIENCE AND TECHNOLOGY

FRG: FUNDED PROGRAM FOR THE DEVELOPMENT OF MICROPERIPHERALS

Bonn INFORMATIONSTECHNIK: MIKROPERIPHERIK [INFORMATION TECHNOLOGY: MICROPERIPHERALS] in German, 1985 pp 1-35

CONTENTS

Preface..... 1

Summary..... 2

Initial Situation and Future Development..... 3

The Concept of Sponsorship..... 8

Financial Need..... 11

Appendix 1:
The Indirect-Specific Sponsorship Measure 12

Appendix 2:
Notes on the Technologies..... 16

Appendix 3:
Stages of Support..... 19

JPRS-WST-86-015

28 March 1986

WEST EUROPE REPORT

SCIENCE AND TECHNOLOGY

FRG INFORMATION TECHNOLOGY: 1984 ANNUAL REPORT

Bonn FORSCHUNG UND TECHNIK ZUM WOHLE DER MENSCHEN: JAHRESBERICHT 1984 [RESEARCH AND TECHNOLOGY FOR THE GOOD OF THE PEOPLE: 1984 ANNUAL REPORT] in German 1984 pp 1-71

CONTENTS

Introduction..... 1

The Federal Ministry of Science and Technology..... 2

Basic Orientation of Research and Technology Policy..... 4

- Federal Research Report 1984..... 4
- Indirect Types of Support..... 6
- Minimizing Red Tape..... 6
- Future Development of Research Institutions..... 6

Basic Research and Long-Term Basic Research Programs..... 8

- The Max Planck Society for the Support of the Sciences..... 9
- Large Installations for Basic Research in the Natural Sciences.. 9
- Oceanology..... 10
- Polar Research..... 10
- Space Research and Space Technology..... 10
- Earth Sciences..... 14
- Humanities and Social Sciences..... 15

Support for Research and Development in the Acquisition of Preliminary Knowledge for Present-Day Readiness and Future Preparedness..... 17

- Ecological Research..... 17
- Environmental Research and Technology..... 18
- Hydrology..... 19
- Climatology..... 20

Safety Research and Safety Technology..... 21
R&D in the Service of Public Health..... 21
Humanizing the Workplace..... 22
Ground Transportation and Traffic..... 22
Raw Materials Research..... 23
Construction Research and Technologies:
Rational Energy Use in the Construction Sector..... 23
Energy Research and Energy Technology..... 24
Technology Assessment..... 29

Support for Research and Development in Key Technologies..... 31

Information Technology..... 31
Manufacturing Technologies..... 33
Biotechnology..... 33
Materials Research..... 35
Technologies Related to Physics..... 36
Chemical Engineering..... 36
Aeronautical Research and Technology..... 37

Oceanology..... 37

Improving the Framework for Research, Development and Innovation in the Private Sector..... 39

Fraunhofer Society for Applied Research..... 39
Transfer of Technology and Know-How..... 40
Research Cooperation Between Industry and Science..... 40
Joint Research..... 41
Sponsorship of the Hiring of Additional Research Personnel..... 41
Start-Up of New Technology-Oriented Companies; Venture Capital.. 42
Specialized Information..... 42
German Research Network..... 43

Other General Types of Sponsorship of Research and Technology..... 44

Collaboration With the Federal States..... 44
International Cooperation..... 44
Fellowships for the Exchanges of Scientists..... 48

Public Relations and the Dissemination of Additional Information Concerning Research, Technology and Innovation..... 49

Supplement: Timetable of Important Events..... 52

Appendix: Organization of the Federal Ministry of Research and Technology..... 55

JPRS-WST-86-016

4 April 1986

WEST EUROPE REPORT
SCIENCE AND TECHNOLOGY

CONTENTS

ADVANCED MATERIALS

Schott R&D in FRG on High Tech Applications of Specialty Glass
(Harmut Welfert; VDI NACHRICHTEN, 10 Jan 86)..... 1

BRITE of EC, BMFT of FRG Fund Advanced Materials Research
(Horst Czichos; VDI NACHRICHTEN, 27 Dec 85)..... 4

Briefs
Finnish Structural Ceramics 7
SEP-Rhone-Poulenc Ceramics 7

AEROSPACE

Differences Between Hermes, U.S. Shuttle Highlighted
(DIE WELTWOCHE, 6 Feb 86)..... 8

AUTOMOBILE INDUSTRY

Renault of France Invests Fr 5 Billion in New Model
(LA TRIBUNE DE L'ECONOMIE, 23 Jan 86)..... 10

CIVIL AVIATION

Airbus Competes for Japanese Airline Orders
(LA TRIBUNE DE L'ECONOMIE, 23 Jan 86)..... 12

Flosdorff To Become Airbus General Director
(FRANKFURTER ALLGEMEINE, 14, 29 Jan 86; DER SPIEGEL,
13 Jan 86)..... 13

Personal Background 13
Organizational Problems at Airbus Industrie 13
Other Appointments 15

FRG To Fund Airbus A-330, 340 Development
(Heinz Heck; DIE WELT, 3 Feb 86)..... 16

COMPUTERS

Bull Strategy for Next 2 Years, Recent Investments, Products
(Various sources, various dates)..... 18

Financial Position, by Michael Cahier 18
Modernization of Manufacturing Facilities 21
Ajax Launched 23

METALLURGICAL INDUSTRIES

Switzerland Achieves Highest Amount Nitrogen in Steel
(FRANKFURTER ZEITUNG/BLICK DURCH DIE WIRTSCHAFT,
5 Feb 86)..... 26

MICROELECTRONICS

Inner Workings of 'Megaproject,' Its Current Status, at Siemens
(Uli Deker; BILD DER WISSENSCHAFT, Nov 85)..... 27

Netherlands Founds Advanced Laser Lab
(PT/AKTUELL, 15 Jan 86)..... 45

Netherlands Funds Increased Microelectronics Training
(Eefke Smit; NRC HANDELSBLAD, 4 Feb 86)..... 46

Alcatel Boosts Invested Capital, Dividends 'Uncertain'
(LA TRIBUNE DE L'ECONOMIE, 25-26 Jan 86)..... 48

Briefs
New Group 'Alcatel' Formed 49
Olivetti-Seiko Liquid Crystal Displays 49
Philips Esprit Project 49

SCIENTIFIC AND INDUSTRIAL POLICY

FRG Officials on Role in SDI, Eureka, 'Technological Europe'
(VDI NACHRICHTEN, 27 Dec 85)..... 50

Income Tax Computation for Various Types of Firms in FRG
(H.-J. Zwingmann; VDI NACHRICHTEN, 27 Dec 85)..... 53

Berlin Center Promotes Start-Ups, Innovation
(Dieter Beste; VDI NACHRICHTEN, 10 Jan 86)..... 57

JPRS-WST-86-017

15 April 1986

WEST EUROPE REPORT
SCIENCE AND TECHNOLOGY

CONTENTS

ADVANCED MATERIALS

Sites, Funding for Netherlands Advanced Materials Research
(Jan Libbenga; NRC HANDELSBLAD, 26 Feb 86)..... 1

AEROSPACE

Volvo Flygmotor of Sweden Involved in ESA, Ariane
(NY TEKNIK, 9 Jan 86)..... 5

Contracts for Ariane Engines, by Jan Lothigius 5
Development of Electric Pump System 8

Swedish Government Support for Space R&D 40 Million
(Eric Dyring; DAGENS NYHETER, 12 Mar 86)..... 9

Saab Participates, Invests in Space Industry
(Nils-Erik Lindell; DAGENS NYHETER, 1 Mar 86)..... 11

Plans for Launching Small Satellites From Esrange in Sweden
(Lars Eriksson; NY TEKNIK, 9 Jan 86)..... 13

Norway Establishes Center for Telemetering Data
(Martin Eide; AFTENPOSTEN, 13 Feb 86)..... 17

BIOTECHNOLOGY

Briefs
Swedish Gene Machine 19

CIVIL AVIATION

Aircraft, Aerospace Testing at Europe's Largest Wind Tunnel
(Hans Friedeman; DE VOLKSKRANT, 8 Feb 86)..... 20

Details on French Bank Loans for Airbus Development
(SUEDDEUTSCHE ZEITUNG, 26 Feb 86)..... 25

FRG on Government Subsidies for Civil Aircraft
(HANDELSBLATT, 28 Feb 86)..... 27

Details on Saab-Scania 1985 Earnings
(FRANKFURTER ALLGEMEINE ZEITUNG, 6 Mar 86)..... 29

COMPUTERS

GMD, Other FRG Institutes Develop 'Suprenum' Supercomputer
(Egon Schmidt; SUEDDEUTSCHE ZEITUNG, 3 Mar 86)..... 30

Philips' Ties to Japanese Technology
(Dick Wittenberg; NRC HANDELSBLAD, 15 Jan 86)..... 32

DEFENSE INDUSTRIES

French SFIM Provides Diversified Technologies
(Jean-Pierre Casamayou; L'USINE NOUVELLE, 6 Mar 86)..... 34

FACTORY AUTOMATION

FRG Develops Laser for Non-Destructive Testing
(FRANKFURTER ZEITUNG/BLICK DURCH DIE WIRTSCHAFT,
26 Feb 86)..... 37

French Software Speeds Up Automated Equipment Programming
(FRANKFURTER ZEITUNG/BLICK DURCH DIE WIRTSCHAFT,
21 Feb 86)..... 38

Seiaf: Elsag/IBM's New Creation in Factory Automation
(Mauro Flego Interview; AUTOMAZIONE INTEGRATA, Apr 85)... 40

MICROELECTRONICS

New Firm Produces, Markets Gate Arrays in Sweden
(Osmo Vatanen; DAGENS NYHETER, 4 Mar 86)..... 45

Comecon Electronics Industries Detailed
(INFORMATICA OGGI, No 14, Feb 86)..... 47

SCIENCE AND INDUSTRIAL POLICY

Minimal Civil Technology Spinoff From SDI for FRG
(Wolfgang Hoffmann; DIE ZEIT, 10 Jan 86)..... 48

Finnish Participation in Esprit, Race Possible
(HUFVUDSTADSBLADET, 18 Feb 86)..... 53

Briefs
Joint Share of European LINS Market 54
Research in Artificial Intelligence 54

TECHNOLOGY TRANSFER

Soviets Establishing Direct Contacts With French Industry
(Philippe Lanone; L'USINE NOUVELLE, 6 Mar 86)..... 55

JPRS-WST-86-018

28 APRIL 1986

WEST EUROPE REPORT

SCIENCE AND TECHNOLOGY

CONTENTS

ADVANCED MATERIALS

Briefs
Krupp Powder Metallurgy R&D 1

AEROSPACE

ESA General Director Reimar Luest on Europe's Goals in Space
(Egon Schmidt; VDI NACHRICHTEN, 10 Jan 86)..... 2

BIOTECHNOLOGY

Scottish Biotech Potential Reviewed
(BIOFUTUR, Feb 86)..... 8

CIVIL AVIATION

Report Casts Doubts on Airbus Industrie Survival
(Olivier Collot; LE SOIR, 12 Mar 86)..... 11

COMPUTERS

European Work on Optical Computer Concept Outlined
(SCIENCES ET AVENIR, Feb 86)..... 13

FACTORY AUTOMATION

Saab-Scania Passenger Car Plant Highly Automated
(Sha; FRANKFURTER ZEITUNG/BLICK DURCH DIE WIRTSCHAFT,
11 Mar 86)..... 15

Composition of Italian Robotics Industry
(Mariangela Pattarozzi; MEDIA DUEMILA, No 13, Jan 86).... 17

Olivetti's Industrial Divisions Profiled
(MEDIA DUEMILA, No 13, Jan 86)..... 20

Briefs
Robot Systems to FRG Auto Firms 23
European Map User Group 23

MICROELECTRONICS

New Fraunhofer Institute for Microstructure Technology in FRG
(FRANKFURTER ALLGEMEINE ZEITUNG, 24 Oct 85)..... 24

SCIENTIFIC AND INDUSTRIAL POLICY

EFTA, EC Seek Closer Cooperation on Research Programs
(Margarete Freisinger; DIE PRESSE, 9 Jan 86)..... 26

EC Offers EFTA Collaboration Prospect in Esprit, Race
(UUSI SUOMI, 7 Mar 86)..... 28

Details on EC 1984-1987 Research Budget
(Tor Norretranders; BORSENS NYHEDSMAGASIN, 10 Feb 86).... 29

New Head of FRG Research Group DFG on Funding Policies
(Axel Hacke; SUEDDEUTSCHE ZEITUNG, 17 Jan 86)..... 32

TECHNOLOGY TRANSFER

Danish Computer Technology to India for Market Share
(Henning Gotz; BERLINGSKE TIDENDE, 10 Mar 86)..... 37

Austria: Increased Computer Export to Comecon Countries
(Erich Hoorn; DIE PRESSE, 12 Mar 86)..... 39

GE Calma Provides Automation Support to Yugoslav Firms
(AUTOMAZIONE OGGI, No 14, Feb 86)..... 41

Briefs
Finland, China S&T Negotiations 42

- END -

END OF FICHE

DATE FILMED

7 May 1987